Reply to Office Action of September 12, 2008

Attorney Docket No. FGF.P0001

Listing of Claims:

(original) An apparatus for image projection and/or material processing having a deflection device (3) for variably deflecting a light beam (2) emanating from a light source (1) onto a projection area or a processing area (7), a modulation device (4) for modulating an intensity of the light beam (2) and a control unit (5) which is connected to the modulation device (4) and by means of which the modulation device (4) can be triggered to modulate the intensity of the light beam (2) according to input data,

wherein

disposed between the deflection device (3) and the projection area or the processing area (7) is a shading element (6), by means of which the light beam (2) is faded out within a multiplicity of time intervals, into which the total duration of the projection or the processing is subdivided, for one or a multiplicity of time segments, and the control unit (5) contains a control program which regulates the modulation device (4) during the time segments in such a manner that an at least approximately constant mean intensity of the light beam (2) is yielded in the time intervals.

(original) An apparatus according to claim 1, wherein

the shading element (6) provides a delimitation of an image region or processing region (8) by means of a margin on at least one side on the projection area or the processing area (7), with the deflection device (3) being designed or triggered in such a manner that during projection or processing, the light beam (2) is repeatedly deflected also to the regions of the margin of the shading element (6).

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 (original) An apparatus according to claim 1, wherein

the shading element (6) is a diaphragm whose diaphragm aperture provides a delimitation of an image region or processing region (8) on the projection area or the processing area (7), with the deflection device (3) being designed or triggered in such a manner that during projection or processing, the light beam (2) is repeatedly deflected also to regions of the diaphragm beyond the diaphragm aperture.

 (original) An apparatus according to claim 1, wherein

the shading element (6) is an optical shutter, which blocks and releases the light beam (2) periodically during projection or processing.

5. (Previously presented) An apparatus according to claim 1,

wherein

the deflection device (3) comprises one or a multiplicity of uniaxially movable mirrors.

6. (Previously presented) An apparatus according to claim 1,

wherein

the deflection device (3) comprises at least one biaxially movable mirror.

7. (Previously presented) An apparatus according to claim 1,

wherein

the deflection device (3) is a microscanner.

8. (Canceled)

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9. (Currently Amended) An apparatus according to claim [[8]] 1,

wherein

the light source (1) is formed by one or a multiplicity of lasers or light diodes.

10. (Previously presented) An apparatus according to claim 1,

wherein

the control unit (5) is connected to the deflection device (3) and designed in such a manner that the deflection device (3) can be triggered by the control unit (5) according to the input data to move the light beam (2) over the projection area or the processing area (7).

11. Currently Amended) A method for projecting images and/or processing materials, the method comprising:

in which

conveying a light beam (2) is conveyed by means of a deflection device (3) over an image region or a processing region (8) of a projection area or a processing area (7) and wherein the light beam is simultaneously modulated in intensity according to input data in order to achieve projection or processing according to the input data,

wherein

sub-dividing a total duration of the projection or
the processing is subdivided into a multiplicity of
time intervals,

fading the light beam (2) is faded out between the deflection device (3) and the projection area or the processing area (7) for one or a multiplicity of time segments of each time interval, and

adjusting is adjusted in the intensity in these time segments in such a manner that an at least

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approximately constant mean intensity of the light beam (2) is yielded in the time intervals.

12. (Currently Amended) A method according to claim 11, wherein further comprising

providing a shading element (6) between the deflection device (3) and the projection area or the processing area (7), a shading element (6) is provided to fade out the light beam (2), which forms a delimitation by means of a margin at least on one side of an image region or a processing region (8) on the projection area or the processing area (7), with the light beam (2) being deflected by the deflection device (3) in such a manner that during projection or processing, the laser beam (2) repeatedly impinges also on regions of the margin of the shading element (6).

13. (Currently Amended) A method according to claim 11, wherein

providing a diaphragm between the deflection device (3) and the projection area or the processing area (7), a diaphragm is provided to fade out the light beam (2), [[whose]] wherein the diaphragm has a diaphragm aperture that forms a delimitation of an image region or a processing region (8) on the projection area or the processing area (7), with the light beam (2) being deflected by the deflection device (3) in such a manner that the light beam (2) repeatedly impinges also on the regions of the diaphragm beyond the diaphragm aperture.

14. (Currently Amended) A method according to claim 11 $\frac{1}{1}$ to $\frac{1}{1}$ further comprising

projecting a sequence of images.

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15. (Currently Amended) A method according to claim 11 $\frac{1}{1}$ to $\frac{1}{1}$ to

visualizing information on the projection area.

16. (Currently Amended) A method according to claim 11 to letter further comprising lettering the processing area.

17. (Currently Amended) A method according to claim 11 to expose further comprising

exposing photosensitive material to the light
beam.

- 18. (Previously presented) Use of the apparatus according to claim 1 to project a sequence of images.
- 19. (Previously presented) Use of the apparatus according to claim 1 to visualize information on the projection area.
- 20. (Previously presented) Use of the apparatus according to claim 1 to letter the processing area.
- 21. (Previously presented) Use of the apparatus according to claim 1 to expose photosensitive material.